Tony Loyd (center), manager of learning technology for John Deere Construction Equipment, and the rest of the John Deere University team.

Deere Moves Forward

When John Deere wanted to upgrade its customer service, it built an online university so it could provide the necessary training fast and inexpensively.

BY GRAE YOHE

Deere & Co. manufactures and sells engines, agricultural equipment and construction machines, which it refers to collectively as "iron." But after a recent customer analysis, the company realized it had to do a lot more.

"The nature of our customers is changing," says Tony Loyd, manager of learning technology for John Deere Construction Equipment, a Deere subsidiary based in Davenport, Iowa. "They're not just looking to us anymore to provide them with the same old solution, which was: 'We make this piece of iron. Do you want one?' The old analogy is that nobody buys a 1/4-inch drill bit because they want a 1/4-inch drill bit. What they want are 1/4-inch holes.

Deere's customers wanted more than just iron: They wanted state-of-the art services to accompany it, extending from the service counter to the construction site to the point of sale.

"Customers said, 'Help me to know how my machine is running via satellite, cell phone, global positioning system, and computer. Tell me how many hours are on that machine, how much fuel it's consuming. Tell me if the oil temperature is higher than it should be, and if I need to [have maintenance work done]," says Loyd.

Deere knew it had the people to provide these total solutions. What it needed was an efficient way of providing them with the necessary training and ongoing support. But it didn't stop there. In addition to Deere personnel, dealerships and customers asked for education. Service technicians needed to learn how to work on new equipment, and buyers wanted to know about the bells and whistles on their iron, be it an engine, a tractor or a fleet of bulldozers.

All of these needs, says Loyd, pointed to Web-based training for employees and customers alike. "[Customers] said, 'We want to enhance our competency, but it needs to be self-study. It needs to be available at 2 a.m. or 2 p.m., whenever I'm available. It should be available around the world, around the clock, and it needs to be consistent."

At final reckoning, customer needs pointed to what Loyd refers to as "the mother of all solutions." The problem was not so much in knowing what John Deere needed, but rather in figuring out how to create it in a reasonable time frame, and at a reasonable price.

So Moline, Ill.-based Deere went to LogicBay Corp., a Minneapolis-based e-learning solutions company. Together, Deere and LogicBay worked to create and launch John Deere University, a Web-based learning portal and one-stop-shop for all of Deere's educational programs—both established classes and new, online courses, all tied together with a customized learning management system.

Starving for Knowledge

Although the final incarnation of John Deere University—if an evolving structure can be said to have such a thing—would be gigantic, LogicBay encouraged Deere to think big, but start small and build fast. What would keep Deere ahead of the competition would be getting some small portion of the portal online as quickly as possible, and then building from there.

Working under what is known as a "4 by 4 strategy," LogicBay's task was to implement four key components (course registration, taking a course online, conducting assessments and returning results) within four months. The heart of this functionality was to be a learning management system from Saba Software Inc. of Redwood Shores, Calif.

"The learning management system is to an online university what the administration building is to a true college campus," explains Joe Rogness, LogicBay's director of transportation practice—a group within LogicBay that works directly with the automotive industry. "It's where you go to sign up for courses, check your transcripts and decide your major or career path."

The four components of this administrative backbone and a group of courses were, Loyd notes, up and running on time and within the initial budget. Support within the company for the online university blossomed immediately.

"As soon as we raised the flag, people from all over the company rallied around it," says Loyd.

"We had many tiny business needs hidden all over the company, none of which were enough to take on e-learning [by themselves]," he continues. When the construction equipment division decided that their business case was strong enough to warrant an e-learning initiative, other divisions across the company began to get in touch and want on board. "[They realized] 'If we band together, we can leverage from each other,'" he adds.

With the Saba infrastructure in place, LogicBay turned to promotion. According to Rogness, selling customers and staff on John Deere University meant giving them a compelling reason to visit the site.

"The mistake a lot of companies make is, they build an online university and launch it, but they don't really think about the message and the perception of the user," he says. "So, we packaged a program that would orient the users to the site and let them know, 'What's in it for me?'" This basic need, which LogicBay calls the WIIFM ("whiff-um") factor, also mandated that the site be easy to use—which it is.

"It's intended to be used with a basic browser," says Rogness. A small window with precisely-scaled image maps, the portal is

designed to fit on the smallest monitors and hence looks the same on virtually any machine. Users don't need plug-ins (other than Flash) or a cutting edge browser to "attend" the university. No downloading of courses is required, either. It all plays on the server.

Thanks to the Saba LMS, the portal also reports scores, tracks curricula and collates data. For users, the "My Profile" feature provides access to transcripts, "My Courses" organizes current and future course loads and "My History" tracks material which has been requested but has not yet been delivered.

Meanwhile, a "Management" link allows supervisors to oversee training requests made by personnel, view the courses in which employees are enrolled, view their training history, and track progress along a certain career track or toward certification for certain compentencies. An "Administration" link allows supervisors to run reports on all of the above.

The university, which consolidates all of Deere's scattered educational offerings into one central location, also features an online store that allows users to buy books, manuals, CD-ROMs and videos. A database search function on the portal's home page, in addition to finding online courses, allows visitors to search for traditional classroom lessons by category, title, keyword and/or geographic location.

The portal's design and functionality—powerful, simple and direct—helped Deere to make sense of a jumble of information.

"Somebody said, 'We are drowning in information, and starving for knowledge,'" says Loyd. "I think that's a great metaphor for what most people are doing in their intranets. They have more information than they could ever want, and they can't figure out what to focus on."

Another issue, says Rogness, was that John Deere University

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would, like it or not, represent Deere & Co. as a whole. It was important that the portal put the company's best foot forward, both to justify the ongoing expense and to maintain the appearance of the John Deere brand.

"We set up and did all of the branding and the creative for the portal," Rogness says. "It's what the user sees. We designed how Saba was going to look and feel, and we configured Saba to meet the business requirements of John Deere."

Despite the power of the Saba LMS, Rogness is quick to point out that custom courseware is what will sustain John Deere University in the long run.

"The reality is, [an LMS] is only one of several components that make up an e-learning strategy," he says. "Once you get your learning management system up, then what are you going to do? It all comes back to the meat on the bone. What are people going there for? The answer is, for relevant content."

Getting Results

Is JDU working? Financially and strategically, the answer seems to be yes. In a recent presentation to the American Society for Training & Development in March, Loyd cited a cost avoidance of $1.7 million for Deere and $811,000 for dealers in the first quarter of 2001. In the same presentation, he

reported that the pilot, launched in November of 2000, serves more than 400 dealerships and he expects additional Deere & Co. business units to come on board in future rounds of expansion.

"John Deere calculates that for every dealership employee who takes a course online instead of traveling to a classroom, the dealership saves a minimum of $1,000," says Loyd. "That is an incredibly conservative estimate when you consider travel, time away from the job and loss of revenue opportunity. The actual numbers are probably double that amount.

"Nonetheless, even using Deere's conservative $1,000 per-employee estimate, if 5,000 dealership personnel take a single course throughout the year, the dealers will avoid spending $5,000,000 this year," he adds.

As for educational function, the answer is the same. Yes, people use it (LogicBay reports that the average visitor stays online for 52 minutes) and yes, they seem to be learning something. While Loyd says it is still too early to draw firm conclusions, he does point to two levels of evaluation and feedback which, when assessed, will guide JDU's ongoing evolution. For individual courses, pre- and post-tests determine whether or not users' skills improve.

On a more holistic level, phone surveys—with students, and then with their supervisors—are conducted 3 to 6 months after courses are completed to determine if performance has been positively affected.

The creation of new courses for John Deere University continues as the programs expand. The original 4 by 4 plan was for a small and fast start, but fleshing out "the mother of all solutions," eventually into other languages, is an ongoing project.

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